

What is claimed is:

1. An information processing apparatus for displaying a plurality of linked objects in a virtual
5 three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space, said information processing apparatus comprising:
a memory for storing object data, and
10 control means for generating images of said objects in accordance with said object data stored in said memory and in accordance with said field of view and rendering said generated images onto a two-dimensional frame,
said control means hierarchically sorting said objects
15 in accordance with link data which indicates links between said objects, for said rendering.
2. The information processing apparatus according to claim 1, wherein said control means renders the images
20 and/or partial images of said objects in order determined by said hierarchical sorting and in accordance with said link data.
3. The information processing apparatus according to claim 1, wherein said control means renders the images
25 and/or partial images of said objects in order determined by said hierarchical sorting, and
said control means renders images and/or partial images of objects of a group of one object and one or more other
30 objects to which said one object is linked, in order of the distance from said viewpoint.
4. An information processing apparatus for displaying linked objects in a virtual three-dimensional
35 space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space, said information processing apparatus

comprising:

a memory for storing object data; and

control means for generating images of said objects in accordance with said object data stored in said memory and
5 rendering said generated images onto a two-dimensional frame,

said control means rendering the image of one object and the image of another object to which said one object is linked, wherein the image of said other object is
10 rendered before the start of or after the end of rendering said one object or between said start and said end of rendering.

5. The information processing apparatus according
15 to claim 4, wherein said control means renders the image or partial images of said one object and the image of said other object in accordance with the distance from said viewpoint.

20 6. A program product stored on a storage medium for use in an information processing apparatus and for displaying a plurality of linked objects in a virtual three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and
25 a viewpoint in said virtual space, said program product comprising the steps of:

hierarchically sorting said objects in accordance with link data which indicates links between said objects,

generating images of said objects in accordance with
30 said object data and in accordance with said field of view, and

rendering said generated images onto a two-dimensional frame in order determined by said hierarchical sorting.

35 7. The program product according to claim 6, wherein the step of rendering comprises rendering the images and/or partial images of said objects in order

determined by said hierarchical sorting and in accordance with said link data.

8. The program product according to claim 6,
5 wherein the step of rendering comprises rendering the images and/or partial images of said objects in order determined by said hierarchical sorting, and

the step of rendering comprises rendering images and/or partial images of objects of a group of one object and one
10 or more other objects to which said one object is linked, in order of the distance from said viewpoint.

9. A program product stored on a storage medium for use in an information processing apparatus and for
15 displaying a plurality of linked objects in a virtual three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space, said program product comprising the steps of:

20 generating images of said objects in accordance with said object data, and

rendering said generated images onto a two-dimensional frame, wherein the step of rendering comprises rendering the image of one object and the image of another object to which
25 said one object is linked, wherein the image of said other object is rendered before the start of or after the end of rendering said one object or between said start and said end of rendering.

30 10. The program product according to claim 9, wherein the step of rendering comprises the image or partial images of said one object and the image of said other object in accordance with the distance from said viewpoint.

35

11. A method for processing object data for displaying a plurality of linked objects in a virtual

three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space, said method comprising the steps of:

- 5 hierarchically sorting said objects in accordance with link data which indicates links between said objects, generating images of said objects in accordance with said object data and in accordance with said field of view, and
- 10 rendering said generated images onto a two-dimensional frame in order determined by said hierarchical sorting.

12. A method for processing object data for displaying a plurality of linked objects in a virtual
15 three-dimensional space in accordance with field-of-view data, said field-of-view data defining a field-of-view and a viewpoint in said virtual space, said method comprising the steps of:

- generating images of said objects in accordance with
20 said object data, and
- rendering said generated images onto a two-dimensional frame, wherein the step of rendering comprises rendering the image of one object and the image of another object to which said one object is linked, wherein the image of said other
25 object is rendered before the start of or after the end of rendering said one object or between said start and said end of rendering.